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Original Communications.

A PARASITIC GROWTH IN THE EXTERNAL AUDITORY MEATUS.

By J. ORNE GREEN, M.D., Boston.

JUNE 12th, 1868. K. M., aged 22, weaver. Generally healthy, but for a long time very subject to cold in the head. Two years ago, first noticed noises in right ear, and soon found that she was becoming deaf; some six months ago, began to have noises in left ear, and gradually became deaf on that side also. This deafness was always increased by a cold in the head, and of late has become steadily worse. Never pain or otorrhoea; hears much better when in a noise as in the mill, and both she herself and friends are confident of this fact. Often has a violent itching in both ears. During a cold, the track of the Eustachian tube is painful to the touch and on swallowing; frequently has sore throat. Now requires a loud voice very near; watch (normally at six feet) heard only on contact. Both passages contain cerumen, which hides the membrana tympani; largest quantity in the left. Throat generally red, with some superficial ulcerations on posterior wall; tonsils slightly enlarged. Both ears were syringed, but nothing brought away. On catheterization, air entered both tympana in puffs, increasing clearness, but not the distance of hearing. Ammoniae murias (gr. v. ad 3*i.*) injected through catheter. To inject into tubes, by Gruber's plan, the same twice a day.

16th.—Watch, left, 1 inch; right, on contact. Air-douche and injection by catheter as before; after it, watch, left, 3 inches. Nothing obtained by syringing, although the dark masses (cerumen, as supposed) are still to be seen. To instil into meatus, twice a day, glycerine.

19th.—Left ear feels clearer, and friends notice that she hears better. Watch, left, 4 inches; right, same. By syringing, a thin membrane, forming a perfect cast of the membrana tympani and part of the

meatus, was obtained from each ear. The membrana tympani were now seen for the first time, and found to be somewhat thickened and slightly sunken; the hammers indistinctly seen, on account of swelling and redness of their vessels. The removal of the obstructing masses did not improve the hearing. Air-douche and injection as before. Omit glycerine.

The masses removed were found to consist of thin membranes, resembling the finger of a glove, which showed impressions of the membrana tympani and walls of the meatus nearly as perfectly as a wax cast—the inner surfaces uneven and of a dark-brown color; the outer, and especially those towards the membrana tympani, smooth and nearly white. By microscopic examination, on the 23d, the various parts of a vegetable parasite, filaments, sporangia, and sporules, were found in all stages of development, and so interwoven as to form a membranous structure; very little epithelium or *débris* was intermixed. The microscopic appearances and measurements corresponded generally with the descriptions and illustrations of *Aspergillus*, as given by Wreden, except that I found greater differences in size and more cross-divisions of the filaments than he describes. The following, by him, gives the chief characteristics of the plant:—“ . . . Numerous cellular filaments, some broken at each end, others (unfruitful) running to a point, while others (fructifying) ended in a round, bubble-shaped swelling (sporangium); from all sides of this projected numerous long, spindle-shaped cells, like brushes, or, when perfectly ripe, rows of round sporules.”

23d.—Reports that on 21st and 22d, an exceedingly hot followed by a very cold day, she took a severe cold, and again had noises and a “stuffed feeling” in ears. Cold now passing off, and noises less loud. Watch, left, 5 inches. To stop all treatment.

26th.—On examination, right membrana tympani rather dull; light reflex of normal shape and in normal position, but with ill-defined edges; above and behind, a dull, crescent-shaped, unusual light reflex; in

[WHOLE No. 2125.]

position of hammer, only a bright-red line and the small process indistinctly seen, as through a thin, white membrane; meatus slightly red near the membrana tympani. Left membrana tympani apparently clean, showing only the thickening above described; meatus slightly red. Both membranes freely movable by Valsalva's plan. By syringing, nothing obtained from either meatus. To instil in right ear, twice a day, soda carbonatis gr. iij., aquæ ʒi.

30th.—Reports, to-day, a slight stinging pain in right ear. Watch, left, 8 inches. Left membrana tympani clear; vessels of manubrium still injected. Right membrana tympani posteriorly whitish, smooth and dull; vessels of manubrium injected. By the strong injection of warm water, several white membranous substances removed, which by microscope showed filaments of the Aspergillus mixed with epithelium and débris; none of the fructifying heads were found.

July 3d.—Both membranæ tympani apparently clean; injection of vessels remains, most marked in right. Watch, left, 13 inches; right, on contact.

10th.—Lower half of left membrana tympani covered with a white membrane; right membrana tympani appears clean. By Valsalva's plan, air enters both freely. By the syringe, a white membrane, forming a cast of the lower half of membrana tympani and the angle with the meatus, removed from left ear; this consisted of epithelium, fat, débris and many filaments of parasite, with an occasional sporangium. To instil, three times a day, instead of soda, hydrgarg. chlorid. corros. gr. iij., aquæ ʒi.

28th.—Hearing as on 3d. Ears syringed, and a few flakes of epithelium obtained, but no traces of parasite. No irritation from drops.

Aug. 4th.—Slight redness and inflammation of meatus. No signs of the parasitic growth. To omit drops, and rub croton oil behind ears.

11th.—Both membranes easily and fully inflated by Valsalva's plan; both generally thickened, but show no other abnormal condition; light reflex normal; injection of hammers and inflammation of passages entirely disappeared; no pain, itching, or disagreeable sensation in ears, except the noises. Watch, right, on contact; left, 13 inches. My ordinary voice well heard at four feet.

The treatment directed to remove the thickening, remained without effect on the hearing, although it was impossible to follow it as I wished, and on Sept. 19th the

condition was the same; no return of the parasite.

On first seeing the case, I was led to suppose that I had to deal only with a simple chronic inflammation of the middle ear, and regarded the collections in the external ear merely as accidental masses of cerumen and not connected with the deafness, as they wanted entirely the firm, compressed look that cerumen has when impacted in the meatus. As soon as the parasitic growth was diagnosed, all treatment was stopped, in order to watch the course of the disease and to decide what part of the symptoms were due to it. The preceding description of the case shows the result.

That parasitic growths were found occasionally in the external auditory meatus has been known for a long time, but it is only within the last two years that the attention of aurists has been called to them. Mayer, in 1844,* described a vegetable growth found in the meatus of a girl with scrofulous otorrhœa, to which he gave the name fungus meatus auditorii externi. Again, in 1851, Pacini† described a growth removed from the auditory meatus, which he considered due to the instilled oil, which had become rancid. In 1857, John Grove, M.R.C.S.,‡ communicated to the Microscopical Society an account of a "Fungus Parasitic in the Human Ear." In '65, Schwartzé§ described a parasitic growth in the meatus, which, after returning several times, he succeeded in destroying. He seems to have been the first to consider the parasite in its practical relation to diseases of the ear, and says:—"It appears very probable that the development of fungus will be found more frequent as the cause of the well-known, often annoying and obstinately recurring chronic inflammation of the external meatus, with abundant collection and discharge of epidermis." He accounts for the presence of the fungus, however, as follows:—"Since for the development of the fungus from the many germinating spores found everywhere in the atmospheric air an adapted soil is very necessary, it is at all events to be supposed that before its existence an exudative inflammation in the external meatus, or at least a loosening and softening of the epidermis, has taken place. The fungus itself now acts as an irritant, produces new hyperemia and exudation, hinders the discharge of the secretion and

* Moller's Archiv., p. 401.

† Kachemisteer's Manual of Parasites.

‡ Ibid.

§ Archiv für Ohrenheilkunde, vol. II. p. 5.

leads to closure of the meatus." Trötsch,* in a note to the third edition of his work on the ear, says that he once found a fungus (*Aspergillus penicillatus*) on a small spot of the meatus in a patient with chronic tympanic catarrh; its presence had given rise to no symptoms, and the discovery was accidental. Wreden,† of St. Petersburg, gives by far the most complete description and drawings which I have been able to find. He has here observed and recorded six cases, and gives a description, with illustrations, of the different parts of the plant; he places it, as has already been done by the above authors, among the Aspergilli, considering it an *Aspergillus glaucus* Leuckhartii, and believes that it bears the same pathogenic relation to some inflammations of the meatus and membrana tympani that the parasite of favus or herpes tonsurans does to those diseases. In his cases, he watched the development of the fungus eight times, and convinced himself that the membrana tympani had not been abraded by an immediately preceding inflammation or purulent process; but, on the contrary, that an obstinate injection of the vessels of the manubrium was the only objective symptom. He observed the membrana tympani to become covered gradually with a white membrane, which increased the subjective symptoms (deafness, ringing and prickling), and in two cases induced the symptoms of acute inflammation of the membrana tympani (myringitis acutissima). As the chief subjective and objective symptoms seem to point to a myringitis, he suggests the name mycomyringitis, or myringitis parasitica.

What special preparation is necessary to furnish the proper soil for the development of the parasite cannot be determined. In four of Wreden's cases there had been some time before inflammatory processes in the ear, and like Schwartzte he advances the hypothesis that a swelling and loosening of the cutis on some small spot had furnished the necessary condition for the generation of the sporules. All ages are liable to be affected; in four of the six cases both ears were affected, and these six cases were found in the examination of one thousand, showing that the affection, apparently, is not so exceedingly rare. The inoculation from one patient to another has not been successful. All but one of the cases were accompanied by a great degree of deafness; loud noises were complained of in all; four

complained of a prickling and pain on pressure of the ear, while the other two had severe pain running to the temple, teeth and nape of the neck, as in myringitis acutissima. The presence of the parasitic growth does not act merely as a mechanical hindrance to the transmission of sounds, as, for example, a collection of cerumen when generally the removal effects a cure, but after the entire parasite has been removed the immediate improvement is slight, as it requires time to reduce the swelling and hyperæmia, and often the injection of the vessels along the manubrium only disappears after several weeks. In all cases there has been a marked tendency to recurrence, only checked by parasiticides, the best of which Wreden considers to be alcoholic solutions of tannin (gr. x. ad. 3*i*). The irritability of the membrana tympani and the meatus, however, renders the selection of the parasiticide a difficult question, as we must have a medicament strong enough to destroy the sporules which are endowed with great vitality, and yet must avoid exciting a painful inflammation and causing still further damage. Wreden found that the development of the parasite was quite rapid, five to eight days being sufficient to cover the entire membrana tympani with a thin white coating of the plant.

Robin* has recently communicated to the French Academy of Sciences a description of two forms of *Aspergillus* from the auditory meatus; in the ten cases in which he found it, there existed no other disease. Highly diluted solutions of the hydrochloride of lime and of arsenite of potassa, he affirms at once destroy the cells.

Although I cannot regard my case entirely uncomplicated by other disease, still by the most careful examination I was unable to discover the least abrasion of the epidermis or the least discharge. The previous disease, as the history and appearances seem to show, was Trötsch's chronic simple catarrh, an insidious chronic inflammation leading to thickening of the lining membrane of the tympanum, the deafness from this cause, however, much greater, especially in the left ear on account of the irritation of the parasite which increased the thickening and congestion. Our present knowledge of these growths is too slight for us to say whether they alone could produce such permanent thickening of the middle ear as was present in this case, but from a review of the cases it does not seem probable.

* Ohrenheilkunde, p. 90, note, and Archiv f. Ohrenheilkunde, vol. iii, p. 2.

† Archiv. f. Ohr., vol. iii.

CHRONIC NASAL CATARRH.

By J. G. PINKHAM, M.D., Lynn.

A Case of twelve Years' standing, treated daily for two Months with a Douche of warm Water and common Salt. Recovery. Remarks on the Disease.

J. C., of Pittsfield, Mass., a student, aged 19 years, came under my care in the early part of June, 1867, presenting the following history and symptoms. He had been troubled for twelve years with nasal catarrh. It was not very severe at first, but had been gradually growing worse, and for the last few years had given him a great deal of distress and annoyance. He had consulted many physicians, regular and irregular, all to no avail. Was a candidate for a cadetship at West Point, and very anxious to be in a sound state of bodily health when he presented himself for examination.

The discharge from the nostrils was thick and purulent, sometimes bloody. Odor offensive. Once in about three days, he threw off from the left nostril a large hollow cast of the cavity, consisting of dried mucus, pus and blood. Considerable irritation was caused by it for some time before its removal. Sense of smell much impaired. Alae nasi are permanently expanded from the continued effort to breathe through obstructed nostrils. No headache; no obstruction of Eustachian tube; no pharyngitis; no dyspepsia; general health good. The patient stated that he took cold very easily during the winter season, and that the complaint was then much worse, the nostrils being, at times, almost completely obstructed. He was advised that treatment, to be effectual, must be persevered in for a long time, and that the improvement would, at first, be slow.

I determined, in this case, to make full trial of the "nasal douche," using the mode of treatment recommended by Thudichum, in the articles published by him in the London *Lancet*, Nov. 26th and Dec. 3d, 1864. As I had no apparatus of the ordinary form, I improvised one out of a glass funnel and a piece of elastic tubing obtained from my laboratory, making a little nose-piece of glass with the blow-pipe. I found this, in every respect, to work as well as the more expensive contrivances sold in the shops.

At the first application, I made use of warm water, to which a little common salt had been added. Owing to the dilated condition of the nostrils, it passed

through but imperfectly; yet it washed away some collections of mucus and pus, giving the patient considerable relief. It caused, however, a peculiar and rather distressing sensation in the back of the head. This soon passed away. After the lapse of a few days, the douche was repeated, with a similar effect. The process was kept up, at intervals of two days, for several weeks, pot. chlor., zinc sulph., tr. iod. comp. being successively added to the solution of common salt. A strong solution of pot. chlor. was used, but no effect was produced differing in any observable degree from that of the common salt. The iodine and zinc superadded a little temporary irritation in certain portions of the nasal passages, but nothing else. Strength of solutions—zinc grs. ij. ad iii., iodine $\frac{m}{v} viij.$, to the ounce of water. The general effect was to clear the nasal passages at the time, to slightly increase the amount of discharge, and to give it a less purulent appearance. The latter effect was due, in all probability, to the fact that the irritant solutions employed excited an inflammation in parts of the membrane hitherto healthy, the secretion from which was of a mucous character. The douche did not prevent the tubular cast from forming, but it became a little thinner, and was sooner discharged.

At this time the patient was called out of town, and treatment was interrupted for two weeks. I saw him once, however, during the interval, and administered the douche. At the instance of a medical friend, I allowed him to smoke a mixture of powdered sage leaves and black pepper, blowing the smoke through the nostrils, a prescription much in vogue among the botanic physicians. No good result followed. I now came to the conclusion that the beneficial effect of the douche would, in this case, be limited chiefly to keeping the nostrils clear of irritant secretions.

On his return, the patient was found to be about the same as when seen first. I resolved to apply the douche daily, and to increase the amount of water gradually, using nothing in it but common salt. This course I pursued. Every evening, the patient came into my office for his douche. The quantity of water was increased to two quarts. In this I put about half an ounce of salt. The unpleasant sensation in the back of the head ceased after a time to follow the douche. The liquid passed freely from one nostril to the other. The discharge gradually diminished in quantity, and assumed a more natural appearance. The cast grew

smaller and smaller, and finally ceased to form. In two months from the time of beginning the daily treatment, the patient accounted himself well. He was furnished with the apparatus, and instructed how to use it in case he was again troubled. After the lapse of ten months from his discharge, he wrote me that he had been occasionally obliged to resort to the douche, but that he still considered himself cured of the old affection, and in a fit condition to present himself for examination at West Point.

REMARKS.—Chronic nasal catarrh, or ozæna, as it is sometimes called, when ulceration has taken place, or the discharges are offensive in odor, may be justly reckoned among the *opprobria medicorum*. Its treatment is largely given up to empirics by practitioners of the regular school. Few sufferers from a long-continued "cold in the head" apply to their family physician for relief. If they do so, they are put off with a simple snuff, doubtless intended more as a placebo than anything else. They may even be met by a refusal to treat the case, or a statement that nothing is required to be done. The patient, annoyed almost beyond endurance by the disgusting complaint, resorts to some one of the ten thousand quack specialists that infest the country, sometimes to his advantage, at other times only to the detriment of nose and pocket. We cannot blame him for taking this course. His physician promises him nothing; the empiric everything: his physician underrates his sufferings and the importance of the disease; the empiric overrates both, and works upon his fears by portraying in terrible colors the consequences of neglect or mal-treatment. The profession itself, by its apathy, is, to some extent, responsible for the large amount of patronage which quacks receive. The causes of this apathy are twofold. In the first place, the disease is not one which places the patient in any immediate danger, or which prevents him from performing the active duties of life: hence the doctor's energies are not aroused; he does not study the case as he does those of a more severe and dangerous character. He thinks the catarrh of little consequence. Some of its results he reckons as distinct diseases, others he attributes to a wrong source. Catarrhal deafness he leaves to the aurist. Frontal headache arises from "biliousness" and calls for calomel or blue pill. Ulceration is an ozæna. Abscess of the antrum, caries and polypus are diseases of themselves. Neither of these can be despised, but the

common parent of them all, and of many other troublesome affections, is a trivial affair not worthy his attention.

In the second place, the disease is a very obstinate one, and often resists the ordinary measures of treatment for years. There are few inducements to enter a contest with no hope, or but a feeble hope, of victory. And so Dr. Q. gets the case. But now that the old methods of treatment have been superseded by new and better ones, it may be confidently asserted that the disease is not incurable, even when of long standing. The case reported is to the point. The nasal douche affords the means of medicating completely the whole of the irregular and otherwise inaccessible surface of the nasal cavities. But as the condition to be alleviated varies, much discrimination is necessary with regard to the nature and strength of remedial solutions employed and the frequency of their application. Many who have tried the douche have been disappointed in the result. They have failed because they have not been careful enough in making a diagnosis, or because they have not persisted sufficiently long in the treatment. A chronic disease needs, as a rule, long-continued treatment. The case reported is typical of a large class, and similar treatment would, in a majority of cases, be successful. Nothing is required but to keep the nasal membrane clean by means of the douche. The common salt is added simply because it has been found by experience that weak brine is less irritant to the healthy portions of the membrane than pure water. The douche should be blood-warm, instead of hot or cold, for a similar reason.

The apparatus, such as I have described above, can be procured for less than fifty cents, and the patient can be easily taught how to use it himself. There is little or no expense to be incurred for medicines. With means like these at his disposal, the physician is certainly culpable who allows a case of chronic nasal catarrh to go without treatment from his hands to those of the quack, thus giving occasion for the enemies of our profession to blaspheme.

The question is often asked by patients, Has "catarrh" any tendency to eventuate in consumption? The specialist says "Yes, a neglected cold in the head may result in consumption." The physician says "No! You are, if anything, less liable to the dreaded malady." Which is right? It seems to me that, in the light of the recent theories upon the nature and origin of pulmonary phthisis, the empiric may have a

grain of reason on his side. Persons with chronic nasal catarrh are very liable to exacerbations of their trouble, especially under the influence of those causes which produce the acute affection in healthy subjects. These exacerbations are nothing more nor less than the supervention of the acute malady upon the chronic. The acute affection may extend into the bronchial tubes, producing a bronchitis, which may become chronic. Chronic bronchitis may result in death, with symptoms similar to those of phthisis; or it may give rise directly to a form of true phthisis; or it may be the exciting cause of a tubercular deposit in persons of a tubercular diathesis.

I by no means affirm that these views are correct, but they have advocates, and are worthy of attention. Should they ever prove true, it would not be the first time that our profession has received instruction from despised sources. We are, perhaps, too prone to condemn theories and modes of treatment simply because they have been abused by charlatans. Such a course may be very natural, but it is unwise, and opposed in spirit to that high philanthropy which would make everything else subordinate to the interests of our patients.

Lynn, October 19, 1868.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
CHARLES D. HOMANS, M.D., SECRETARY.

AUG. 24th.—*Scirrhus of the Pylorus*.—Dr. COTTING reported the case.

A. B., jeweller, aged 51, paterfamilias. Illness began in February, 1868, according to his wife's account. Was treated, without advantage, by a homeopath till March 19th, when he went to a "mesmeric woman." Was better, and up to 4th May gained 5 pounds; had good appetite, and was able to eat everything. May 8th (while in New York), had chill, followed by fever ("intermittent"), which lasted two weeks. On return, continued to go to his business, though suffering much. After interval of two to three weeks, fever returned, and continued almost daily until a few weeks before death (Aug. 11th). Went to business till July 2d. Rode out, last time, July 7th. Throughout past winter, to lie on either side produced a faintness, but not pain, until five weeks before death, when he could lie and sleep for hours on left side. Could eat most things—beef-

steaks, birds, &c.—till a few days before death, most of which seemed to be properly digested, with only a little occasional pain "like dyspepsia." Had dejections alternate days, by enemata. Faeces normal. About three and a half weeks before death, began to vomit; at first, every two or three days, then every day, the last three days twice a day, and on day of death every fifteen minutes while awake—generally throwing up from a gill to a pint of liquid (dissolved food) and mucus. Vomiting—usually preceded by acidity in throat and general uneasiness—could be controlled for a long time, but was easily induced by turning and lying on right side for a few moments. Vomiting gave relief, and he always declared that he felt stronger after its occurrence.

Dr. Cotting saw the patient, for the first time, July 26th. Found him extremely emaciated, but unaware of his condition, and not doubting the possibility of finding a "remedy which would remove the cause of his illness." Pulse 75. Respiration normal. Appetite good. Tongue slightly furred on back part. "Food giving no distress as a general thing."

Found tumor a little to right of median line, in epigastric region, evidently connected with stomach, which hung from it, like a large bag of liquid, to the right. (Vomited about half a pint, which reduced this bag.) Diagnosticated scirrhus pylori, and announced it to family. Visited him one week, regulated the food, and amount thereof to a quantity which reduced the bulk of stomach-bag, &c. He had a pretty comfortable week of it. As no medicino was ordered, and an unfavorable prognosis was given, he preferred the "spiritual woman," who said prognosis was wrong, and that she (for Dr. Rush) would cure him.

His family report that, from the last time he was seen by Dr. Cotting, his pulse varied from 70 to 80. He was able to take some nourishment every day, but generally vomited considerably, sometimes as much as a pint; his food consisted of gruel, beef-tea, woodcock, beefsteak, &c., which he eat with relish most of the time, though sometimes it oppressed him, and he was obliged to throw them up. He had sometimes pain in the back, though not severe. He however gradually lost his strength, and died on August 11th, having vomited pretty constantly for the last 48 hours.

The autopsy revealed a scirrhouus tumor around pyloric orifice, from three to four inches long, about two inches in diameter. Pyloric orifice reduced to a tubular passage

through scirrhouus mass of one fourth to one third of an inch in diameter, and of length of tumor. This explained the freedom from acute pain, and the quantity passed into bowels, as well as that kept back to be vomited. Rest of stomach thin, greatly enlarged, and containing about a gallon of dark, foul-looking liquid. Other abdominal organs perfectly healthy. Head and chest not examined.

SEPT. 14th.—*Calcareous Degeneration of the Membranes of the Spinal Cord; Severe Spasmodic Affection of the Muscles of the Body generally before Death.*—Dr. J. P. REYNOLDS reported the case and Dr. S. G. WEBBER showed the specimen.

A. K., aged 17, single, domestic, entered City Hospital July 27, with well marked symptoms of chorea; the upper extremities and face were in perpetual motion, and the lower extremities moved also irregularly but less violently than the upper. Her speech was much affected. She had never been strong, but had been well until the week previous. Then without ascertainable cause the present symptoms commenced. It was reported by friends that she had swallowed a pin, and they also said that her catamenia had been absent seven weeks.

At entrance the bowels were regular, tongue clean. Pulse 78.

Bromide potass. was administered in twenty gr. doses, every four hours.

In the afternoon of the same day the convulsive movements became so violent as to indicate the administration of ether, and she soon became quiet, remaining so as long as the effect of the ether lasted.

No relief was obtained from repeated doses of potass. bromidum, and the second day (ninth of the disease) Tr. nucis vomica was given in doses of ten drops ter die, with ice to spine. No relief followed, and the next day, a blister 3x3 was applied to the back of neck. The bromide of potass. and tr. nucis vom. were continued. Increasing exhaustion became manifest. The contortions of the muscles of the face in particular were very distressing. The tongue was thrust rapidly from the mouth. The eyelids quickly opened and closed, and the head was violently thrown from side to side, unceasingly. There was no cessation of the symptoms, and patient died on the eleventh day of the disease.

Examination, twenty-six hours after death, discovered no abnormal appearances except a distention of the meningo-rachidian veins about the dorsal enlargement of the cord. The brain and cord were transmitted entire

to Dr. S. G. Webber, for minute examination.

The following is Dr. Webber's description of the results of his examination:

"The brain and cord were found in my office after having been in water several hours. They had consequently macerated somewhat. The brain seemed healthy. The pons and medulla were very soft, especially the latter. On laying open the sheath of the cord there was found on the inner surface of the dura mater, adherent to it but separable, and extending from the lower part of the cervical enlargement to the lower part of the lumbar enlargement, at which point the cord had broken, a calcareous incrustation, a degeneration of the arachnoid. Posteriorly this formed a continuous sheath. Anteriorly and above the lower part of the cervical enlargement posteriorly there were single spots of the incrustation. The surface of the deposit towards the dura mater was comparatively smooth; the surface towards the pia mater was rough, having short processes like villi. The whole cord was rather soft. It was placed in a solution of chromic acid, but the next day was nearly disfluent. The vessels of the pia matter were not especially full. The roots of the nerves were not changed in external appearance, and were not exposed to the irritation from the calcareous degeneration more than the body of the cord.

"I should say it was very hot weather when I got the specimens, and probably that, with the time that they had been in water, prevented their proper preservation."

SEPT. 14th.—*Fish-bone extracted from the Esophagus by the "Bristle Probang."*—Dr. COTTING reported the case.

A woman, 75 years of age, sent for him to remove a fish-bone from her throat, which she thought had lodged there while she was eating her dinner, four days previously. She was suffering much pain in the throat; was unable to swallow anything except a little liquid, and that with great effort and distress. The tongue was furred; the throat somewhat hot and sore. There was tenderness on pressure on right side of the neck, about on a level with the middle of the cricoid cartilage, and under the edge of the sterno-mastoid muscle, in the region where the union of the pharynx with the esophagus forms a little sulcus, or pocket, which, if not intended for the purpose, certainly serves as frequent receptacle for the lodgment of foreign bodies. The bone could not be felt by the finger,

though forced down as far as possible. Common probangs, &c., failed to detect anything.

Having seen, the evening previous, in the *New York Medical Journal* for June, 1868, an account of the "bristle probang," successfully used by Prof. Sayre in several similar cases, Dr. Cotting made such a probang from Dr. Sayre's description; and on the following day had the satisfaction of removing the bone on first trial.

Although not a new instrument, nor claimed as such by Prof. Sayre, yet Dr. Cotting thought it so ingenious, so effective, and so readily constructed, that it ought to be revived and made known to all; he therefore showed the instrument he had himself made, and the bone removed by it.

Through the kindness of Prof. Sayre, Dr. Cotting had permission to use the plates of the figures in the article referred to, and he added the following description in Prof. Sayre's own language:—

"I therefore determined," says Prof. Sayre, "to use the bristle-probang. This instrument was invented, I think, by a surgeon in the East India Service, but whose name I have never heard. For an emergency occurring some weeks previously, I had made one of these instruments in the following manner. I took an ordinary No. 10 elastic catheter, and cut off about one inch from its lower end; I then ran through it a flexible whalebone about three inches longer than the catheter, and tied on its end a small piece of sponge. I then took to pieces an ordinary paint brush and tied one end of the bristles around the sponge, completely surrounding the whalebone rod with them. The other end of the bristles I tied around the cut extremity of the catheter." [Any hog's-bristles of usual length will answer. The thick ends should be attached to the whale-bone rod.]

"Fig. 1, one fourth natural size, represents the instrument when complete. By a slight twisting, the bundle of bristles can

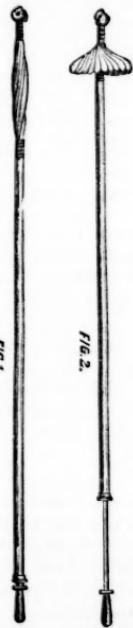
be reduced in diameter to about the size of the catheter. By holding the catheter firmly with one hand, and with the other drawing upon the rod so as to bring the sponge toward the catheter, each of the bristles is bent into a loop, and the whole bundle is converted into a disc about five inches in circumference, Figure 2, large enough to completely sweep the œsophagus and to remove any foreign body lodged therein.

"The sponge having been dipped in water, the instrument was extended, and was readily passed the entire length of the œsophagus without obstruction; it was then distended in the manner described, and slowly withdrawn with a slight twirling movement, so as to sweep out all parts of the tube, and fortunately brought out the plate and tooth on its meshes without difficulty, and with scarcely any pain."

The size and character of the bone removed in Dr. Cotting's case is faithfully shown in the accompanying figure, Fig. 3. The bone was apparently a portion of a gill-cover. One edge of it was thin and sharp; the other as if divided by a cutting instrument.



Fig. 3.



Bibliographical Notices.

Outlines of Physiology, Human and Comparative. By JOHN MARSHALL, F.R.S., Professor of Surgery in University College, London; Surgeon to the University College Hospital. With additions by FRANCIS G. SMITH, M.D., Professor of the Institutes of Medicine in the University of Pennsylvania. Philadelphia: Henry C. Lea. 1868. 8vo. Pp. 1026.

The author states that this work was intended for educational purposes especially; the science of Physiology has been treated as dependent on those of Anatomy, Chemistry and Physics. The best and most recent authorities on these subjects have been consulted by the author, and the American editor has found but few additions to make.

The work is far more comprehensive in its scope than such special treatises as that of Dalton, and the author has rather followed the plan pursued by Carpenter. To the physician as well as to the student such work is of very great value, and it would certainly be cause for great rejoicing, if

every book designed for the student reached as high a standard of excellence as this.

The volume commences with a short anatomical description of the human body, which is followed by an account of its histology, and the physical and chemical properties of its tissues. General Physiology comes next, and the vital properties of the tissues, the animal functions in general, and the relations of man with the rest of the animal, and with the vegetable and mineral kingdoms are described. A sketch is given of the subdivisions of the animal and vegetable kingdoms.

The remaining seven eighths of the volume are devoted to Special Physiology, the larger part being given to the nutritive and reproductive functions. It would be impossible within the limits of the space which is allowed us to give an adequate review of this book, and we shall therefore content ourselves with giving an idea of the manner in which the whole is treated by examples of the method of treatment of one or two special subjects.

Under the head of Motion, we find Muscular Contractility; Phenomena accompanying Muscular Contraction, the muscular sound, the production of heat, and its relations to electricity; Cause of Muscular Contractility, which the author considers still not satisfactorily settled, though the different theories regarding it are given; the Rigidity of Death; Ciliary Motion; and Movements of Animal Sarcode and Protoplasm. The Movements of Man and Animals follow under these subdivisions, viz.: Locomotive Organs in Man, the bones, joints and muscles; the Mechanics of the Body, including the distribution of its weight, or centre of gravity, its basis of support, and the nature of the levers employed in the movement of its several parts; the External Resisting Media, and Forms of Progression; the Locomotion of Man and of Animals, on Solids, in Fluids, and in Air; Prehension and Manipulation; and Expression and Gesture in Man, and in Animals. Each of these subdivisions is fully discussed, and each of the separate functions is treated in a thorough manner. We readily commend the book to the reader.

Esophagotomy for the removal of Foreign Bodies: with a History of the Operation.
Second Edition, revised, with additional Cases. By DAVID W. CHEVERER, M.D., Adjunct Professor of Clinical Surgery in
VOL. II.—No. 16A

Harvard University; Surgeon to the Boston City Hospital.

This monograph sets clearly before the reader all the evidence which diligent effort has succeeded in collecting concerning an operation which has hitherto been regarded as of questionable utility and safety.

If it proves that when a foreign body is lodged in the oesophagus so that it can neither be drawn up nor pushed down, it should be cut for without delay, as in the case of a foreign body in the trachea, an advance has been made in practical surgery. We think it is fairly shown that under such circumstances, which are very unusual, the dangers of retention are much greater than those of extraction through the oesophageal walls.

D.

Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 19, 1868.

HOW TO STUDY MEDICINE.—No. V.

MATERIA MEDICA.

We have now done with the fundamental parts of the study of medicine; and we place them in the following order:—Chemistry, Anatomy, Physiology, Pathology, Surgery.

We pass next to applied science, and the treatment of disease. *MATERIA MEDICA* is the classic name given to the *armamentarium* of our profession.

We conceive that the study of drugs should be prosecuted in the following order:—

Botany, Pharmacy, Physiological effects, Therapeutical effects. Botany supplies our tools; Pharmacy prepares them for use; Physiology (experimental) demonstrates their action; and Therapeutics applies this action to the treatment of disease.

We regret to say that the majority of students pay attention only to the last division of the subject. Botany is so far unknown to them that they are lost and confounded at the common names of the plants they prescribe: while they are so ignorant of Pharmacy that they could not recognize drugs if they saw them. It is only very recently, also, that attention has begun to be paid to experimental research

on the action of medicines in health. But volumes on volumes have been exhausted in alternate descriptions and contradictions of their supposed therapeutical effects in disease. A faulty method of teaching, and a false conception of terms have been the cause of most past errors in this department of medicine. *Materia medica*, instead of being taught from Nature and the compounding mortar and retort, has been learned only from books and lectures, dry and bloodless methods of dealing with a vital subject. Teaching has been theoretical and didactic, and not practical and demonstrative. Few, however, would hesitate to admit that the young physician who could cull and recognize a domestic drug, prepare it for administration, so that it would be both compatible and palatable, and could illustrate by actual experiment what it would do in the system in health, was better prepared to marshal his forces to attack disease than the theorist who blindly followed the old masters, and sought refuge in authority, when at a loss. To us it seems probable that much of the prevailing scepticism as to the small benefit, or no benefit of drugs in disease, has arisen from careless teaching and loose theorizing on their supposed effects, without recognizing the importance of their purity, their preparation, and their dose; and that very many adherents to the school of infinitesimal doses have been converted by the ease and readiness with which such doses can be given to children, without disgust.

Of one thing we are quite certain from experience in our life in a hospital when a student, that if the physician had to compound and prepare his own prescriptions he would give much less medicine; and we suspect that the same will hold true of the country practitioner here, and of the practising apothecary in England, who furnish their own medicines to the patient.

We hold, then, that the medical student should pass the second summer of his studies in the pursuit of botany, and in actual work with an educated druggist, reserving a certain portion of his time for experiments on the lower animals, and on himself, in health. Then, and not till then, will he be ready to derive benefit from formal

courses of lectures on *Materia Medica* as usually given in our medical schools.

TRIBUTE TO DR. STORER.

We are allowed to publish the following extract from Prof. Holmes's introductory lecture:—

"There is a certain pleasure in beginning a new course of lectures. The relation between lecturer and listeners is a friendly and courteous one. I recognize this most cordially as I meet you, many of you strangers whose faces will become familiar to me, and who will remember me, let me hope kindly, when you are old and I am with those who have gone before.

"But it saddens me to think that I have parted with a colleague with whom I have been associated longer than with any other; whose connection with me as a teacher covers more than half my life. To Dr. David Humphreys Storer I owe my first introduction to the office of formal medical teaching, and for thirty years we have been working side by side, with mutual confidence and unchanged good feeling. He of his own motion—inspiration, I might almost call it—projected and founded the Tremont Medical School, of which Dr. Jacob Bigelow, who may well stand at the head of the Medical Profession in America, if any man can claim such a place, in virtue of his labors, his many-sided accomplishments and his sagacious wisdom, was the oldest member. With these two gentlemen were associated that most kind-hearted, genial, sensible practitioner, Edward Reynolds, and myself. I think this school did excellent work in its day in the cause of education. Whatever it effected, the mainspring of its activity was always Dr. Storer. He had an honest pride in its success, a success very remarkable when it is remembered how long it flourished and in competition with what able rivals. Various changes occurred in the organization of this school, and at length, in the full enjoyment of an ever increasing popularity, it was merged in the Summer school of the University in which all its teachers had become Professors. I can speak to many of you therefore as late pupils of Dr. Storer. You know the energy and enthusiasm with which he taught you in the Lecture-room. You know the interest he took in the personal welfare of every student with whom he came in contact. He was the ardent, active friend of every young man to whom he thought he could be useful. And throughout the long period that I have been his

fellow-worker, it pleases me to remember that no word of difference ever rose between us, that whether we agreed or disagreed on this or that point of policy, we always labored together in perfect harmony, and that whatever may be the pain of parting company, we can both look back on an unbroken record where our names have stood together for a whole generation. My regrets—our regrets and affectionate remembrance follow him as he leaves us, and while we extend the heartiest welcome to the new fellow workers who have joined our ranks, we must be pardoned if the greeting we extend to them is somewhat sobered by the absence of the friend with whom, as colleague, we are to meet no more."

CASE OF LARGE FIBROUS TUMOR OF UTERUS REMOVED BY ENUCLEATION AND AVULSION. By JOHN SCOTT, M.D., F.R.C.S.I., F.E.S.L., &c., Surgeon to the California State Woman's Hospital.—The frequency of fibrous tumors of the uterus, the serious results to which they give rise, and the fact that, till lately, all attempts at their removal have been, with few exceptions, either fruitless or attended with the utmost danger to the patient, are, I think, a sufficient apology for laying before the profession the following very interesting case :

Mrs. J., aged 45 ; married twenty-four years ; one son living, aged 23 years. *History.*—Well up to five years ago, when a severe haemorrhage came on and lasted for a week. The following menstrual period another severe bleeding came on, which lasted much longer, and from that time to the present—a period of five years—she has had constant haemorrhage for three out of every four weeks. The quantity lost at times, particularly at the catamenial periods, has been enormous, while at other times it has consisted of a constant passive drain, aggravated by the slightest exertion, producing such weakness and exhaustion that her death was looked on as imminent.

16th March, 1868.—*Present state:*—Patient exceedingly anemic ; pulse 120, weak, intermittent and compressible ; cardiac bruit ; sleeplessness, oedema, great debility. On examination, the uterus felt as large as a four and a half months' pregnancy ; hard and lobulated to the touch, and lying over to left side ; per vaginam, the organ was felt low down in the pelvis ; the os thin and dilated to a little more than the size of a dollar, with a firm, smooth tumor projecting through it. Was able to pass the finger between the tumor and uterus for a con-

siderable distance in front and to right side ; but posteriorly and to the left side, it was found attached by connective tissue, which was easily broken up by the finger. The speculum revealed a glistening tumor protruding through the os, the distended uterus filling up the pelvis.

As the patient had but recently lost a very large quantity of blood, and it was feared that a recurrence of haemorrhage might prove fatal, I recommended her to submit to an operation for its removal, to which she at once consented. I at once divided the cervix with a scissors, and having controlled the slight bleeding with perchloride of iron on lint, I ordered an aperient preparatory to the operation. Drs. T. Bennett and W. H. Davies kindly assisted me, and the patient being fully under the influence of chloroform, I began the process of enucleation by breaking up with my finger, as high as I could reach, the connective tissue which bound the tumor to the uterus, and then used a uterine sound for the same purpose. I then fastened in the tumor a strong vulsellum, but, with the utmost traction I could employ, assisted by Dr. Bennett, I was unable to move the tumor in the slightest degree. As the os was insufficiently dilated to allow of the passage of the tumor, I enlarged the incisions on each side, and having got a blunt hook high up over the tumor, and with the vulsellum attached below, we did our utmost by traction to dislodge it, but without success. Every pull brought the uterus with it, till at last it seemed as if the organ would come out entirely. We then determined on endeavoring to divide the tumor in the uterus, and deliver it piecemeal. For this purpose, I managed to introduce an erasur, carrying a steel wire, and, after some manipulation, got it well over the tumor and divided it. On extraction, we found that about one third of the tumor had come away. At this stage of the proceedings, the patient appeared likely to succumb under the chloroform, but respiration was soon restored, and the operation proceeded with. I was now enabled to pass my hand higher up, and having enucleated as much as I could reach, I again got the erasur in and cut through the greater portion of the remaining tumor, and having extracted it, I passed up my hand and detached the remainder. To ascertain that nothing was left, I again explored the interior, when I found a small fibroid at the highest portion of the cavity, and shelled it out with my finger and extracted it. The operation had lasted just one hour and ten minutes, and

the patient had not lost more than six ounces of blood. The patient made an uninterrupted and rapid recovery, and since then has continued to gain health and strength, and has had no return of the bleeding; and the following menstrual discharge lasted between four and five days, and then disappeared. I requested an examination a month after the operation, and finding that the uterus remained harder and somewhat larger than natural, and that a whitish discharge existed, I dilated the cavity with a sponge tent, and injected tincture of iodine, with the happiest effects.

The tumor weighed two pounds, was seven inches long, twelve inches in circumference, nodulated, and had a distinct fibro-cellular investment. It had evidently been an intramural growth, its nidus being high up in the left wall of the fundus, from which it had been extruded by uterine contractions.

Hitherto, the treatment of fibrous tumors of the uterus has been to the last degree unsatisfactory and discouraging; for, while haemorrhage, generally of an alarming kind, has been the prominent symptom attending them, haemostatic remedies are unavailing, and too often the physician has had to stand helpless by, while his patient perished before his eyes. I speak more especially of intramural tumors, which, from their mere presence in the uterus, act as a constant irritant in increasing and prolonging the congestion of menstruation, and giving rise to a passive haemorrhage, which increases as the patient grows anaemic, till, as in the above case, it is almost constant. When the tumor has become pedunculated (a fibroid polypus), or the process of enucleation has been so far completed by Nature, that it is held by only slight attachment, the removal by the scissors or ecraseur is not difficult; but, where the tumor is attached by a broad base, or only projecting into the uterine cavity, the difficulty of arresting the haemorrhage and removing the growth has been formidable indeed. To Mr. Baker Brown we owe the very valuable suggestion of splitting the cervix, as a mode of arresting the haemorrhage; and while this practice may fail, and probably would fail where haemorrhage has its source in venous sinuses, existing between the tumor and the uterus, it is eminently successful in the majority of cases where the bleeding is capillary and of a passive character. In October of last year, I was called to see a case where no other treatment was available, but in which it was eminently successful. I found the patient,

a married woman, aged 35 years, perfectly exsanguine, and reduced to the last degree of debility from a haemorrhage which had existed for years, but had been incessant and enormous for the last four months. The uterus was enlarged to the size of a five months' pregnancy, was hard and uneven to the feel, and projecting over the pelvis and to the left side. On examination per vaginam, I found the uterus so anteverted, that it was with the utmost difficulty I could drag the os partially into the field of vision, and the cervix and body of such stony hardness, that I could make no proper diagnosis of the contents. There was no erosion, and the os was white and bloodless in appearance. Suspecting that it might be a case of hard scirrhus, I was at first afraid to interfere with it, but the continuance of the haemorrhage impelled me to do something for relief. With a curved scissors I divided the cervix up to the vaginal junction on each side, and subsequently dilated the canal with sponge tents, followed by injections of carbolic acid and glycerine—one part to six; and from that moment to the present there has not been a drop of bleeding. Even the catamenia have entirely disappeared. I sent the patient to the country to recruit, and she returned fat and strong, capable of undergoing almost any exertion, and scarcely suffering any inconvenience from the tumor, which had diminished to less than one-half its former size. After a lapse of three months I again examined the patient, and found the uterus more anteverted than ever, of stony hardness, and exhibiting but a trace of the incisions; but, as the tumor had not increased in size, and she continued to enjoy good health, I left matters as they were.

While Dr. Clay, of Manchester, Baker Brown, and others in Europe, Atlee of Philadelphia, and Peaslee, of New York, have successfully removed *individual* tumors, the credit of successfully initiating a more daring and far more successful practice is clearly due to Dr. Matthew Duncan, of Edinburgh, whose late writings and cases merit the attention of the profession. He has demonstrated the possibility and the safety of removing fibrous tumors of large growth, where Nature has only begun the process of enucleation, and where the degree of violence used in dislodging them from and dragging them out of their bed is such that most men would stand aghast at a procedure they would at first look on as unwarrantably dangerous to the patient. His mode of procedure may be briefly

summarized: Where uterine haemorrhage is caused by the existence of a fibrous tumor, the object is, first, to arrest the hemorrhage; and, secondly, to remove the tumor in such a way as may be most practicable in the particular case. To avert the hemorrhage, incision of the cervix by the scissors or the bistoury (the scissors being much preferable) is frequently found efficient; and if bleeding occurs from the operation (which it seldom does), a pledget of lint soaked in solution of perchloride of iron will check it. Subsequently, the canal should be dilated with sponge tents, and then an exploration of the cavity will determine whether the tumor has become pedunculated—if enucleation has only been partially effected, or if the tumor is simply projecting into the uterine cavity. Where the tumor is attached by a neck (a false polypus), the latter may be divided by the long curved scissors, by twisting and dragging the tumor, or by the ecraseur, as may be practicable. Where enucleation has been partially effected, a strong vulsellum is inserted into the tumor, and traction, steady and long continued, is used till it is dragged from its bed and delivered. In cases where enucleation has not begun, or only partially advanced, a different course is advisable. The haemorrhage having been restrained by division of the cervix (and, if necessary, the injection of perchloride of iron), a knife should be passed into the uterus, and the tumor incised through its whole length: ergot should be given, and it will be found, after a variable time, that the contractions of the uterus will sufficiently extrude it into the cavity to allow of operative proceedings being undertaken. In one of Dr. M. Duncan's cases, the operation lasted a whole day, and yet, notwithstanding the violence used, the patient made an uninterrupted recovery. The greatest difficulty has been found in delivering the tumor, when separated, through the narrow os and contracted vagina, the perineum having sometimes given way in the attempt. To obviate this, I would suggest the division of the tumor in the uterus, as effected in the case I have narrated; but, had I not had the ecraseur I used, I could scarcely have accomplished it with those ordinarily in use. The chain is clumsy and unmanageable, and the twisted wire is difficult to pass up over a tumor which entirely fills the organ, and even the strands often give way in cutting through such a dense mass. The ecraseur I use is armed with a single wire, made of the best Swedish steel, *unannealed*, and though rather stiff, it retains any bend you give it,

while it is so tough that it will cut through the largest and firmest tumor as clean as a knife. I have used it in amputating the cervix uteri, and by bending the wire to a right angle, the division has been effected as directly transverse as if effected by the knife externally. With this instrument, the tumor may be divided in utero and extracted piecemeal; and, furthermore, it will not be found necessary to use such violent traction in future, for the greater portion of the tumor having been extracted, the remainder can be easily enucleated and removed by the fingers. In Dr. Duncan's cases, the patients were invariably freed from haemorrhage and restored to health; but he notices the continued existence of a glairy or watery discharge afterwards, to which he seems to have paid no attention. My practice is to examine such cases afterwards, and having dilated with sponge tents, I find that an injection of iodine, repeated, if necessary, after one or two periods, has the effect of restoring the organ to a state of integrity, and of checking the tendency to future growths of the same kind.—*California Medical Gazette*.

PARACENTESIS CRURIS.—(To the Editor of the Lancet.) Sir,—In 1861 you inserted in your periodical a description of a method of relieving anasarca by deep puncture, which I ventured to submit to your notice as both novel and successful. A case of the kind has recently been attended with a result so unexpected and remarkable that it appears to me very desirable that it should be made known to the profession.

For reasons that need not be given, the report must be brief and confined to the fact about to be described, the more so as in other respects there was nothing unusual to be mentioned.

The patient, a lady aged about forty-five, was suffering from general anasarca, caused by disease of the heart. The legs were enormously swollen, and to such an extent that a large red patch appeared on each, plainly preparatory to their bursting. Any other than a raised position in bed had long been impossible, and nothing need be said as to shortness of breathing, &c.; the enlargement extended up to the loins and over the abdomen, and, in short, all the attendant circumstances were such as are usually present in these cases.

The operation was at once determined upon; but as the patient (simple as it is) felt the greatest alarm on its being proposed, my worthy coadjutor suggested that it should be done at first in one leg only; and as it seemed clear enough that when

the water was let off from the right leg, and from all parts as far as the groin of the left, the unwieldy and irksome state of this latter limb would manifestly remove any reluctance to its being repeated, the puncture was accordingly made in the right foot.

On our visit the following day, besides the reduced size of the right leg, and the improvement in the breathing, we were pleasingly told that "the other thigh was a good deal softer." This we then attributed to fancy; but, to our surprise, at our next visit the enlargement in both legs had actually diminished in nearly the same degree. The relief, in truth, was in a few days almost as complete as if both legs had been operated upon, and at the same time. The patient was able to lie down, and to move from room to room with ease, and even to go up and down stairs.

The only surprising point in this case is the fact of the water having ascended one leg and made its way out at the other foot. By the ordinary law of gravitation this could not take place. Could it have been effected on the principle of the syphon? At all events, it seems that this accidental teaching suggests an improvement, and no unimportant one, of operating on one leg only.—*Lancet.*

REMARKABLE CASE OF URETHRAL CALCULI. The case of which the following notice is merely an abstract, was read to the Société Impériale de Chirurgie, by M. Liegeois; the history of the case was written by M. Bouché of Lorraine, under whose care the patient was:—

The patient, aged 72, had suffered for many years from pain in the penis, which for the last few days had become intense. On examination, I found at the lower part of the penis, behind the scrotum, a vast opening which discharged urine and blood. Pressing on the organ, I felt a hard body which was easily pushed through the opening. This was a calculus, which showed on one of its sides a smooth regular facet. Guided by this, I examined, and found another, which was easily enough extracted by a pair of dressing forceps. This also had two facets, showing that a third still remained. This, after some trouble, and after putting the patient in a warm bath, I also removed, and found it larger than both the others put together. It having only one facet it was obviously the last. The patient was immediately relieved. The three together weighed ninety-four grammes (upwards of three ounces).

The patient stated that for more than forty years he had had pain in the root of his penis, but that, as it was not bad enough to prevent him from working, he had never consulted any one. For fifteen years, there had been the opening in the perineum, which discharged urine and blood. There were six small fistulous openings above, admitting only a fine probe, but through which urine passed in very small quantity. Great relief followed the operation, but the fistulae never completely closed, and the patient died of exhaustion the next winter.

The great size of the stone and long duration of the symptoms are not unexampled. Camper has recorded one which weighed one hundred and sixty grammes (nearly six ounces), and had existed in the urethra during the whole life of a man of fifty-four. The elder Leroy-d'Etiolles had removed one from the urethra which had been there for thirty-seven years; Ollier, another of thirty-four years standing. The largest of the three stones is perforated through its whole length by a canal, which opens at its faceted end by two orifices. This is probably unique.

Another point of difficulty and rarity in this case is the presence of three calculi. Is this the result of a spontaneous fracture of a previously existing single calculus, or were the three originally separate formations? In M. Liegeois's opinion, the calculi had been formed separately in the kidney or bladder, had passed into the urethra as separate calculi, and there had increased in size by constant new layers, and assumed their peculiar shape, and obtained these facets by constant rubbing.—*Edinburgh Medical Journal.*

FRACTURE OF PUBIS BY MUSCULAR CONTRACTION.—M. Guyon reported the case to the Imperial Society of Surgery at Paris, in the name of M. Letenneur of Nantes.

The subject of the observation was a woman, aged 43, of masculine appearance, who, with her husband, aged 68, was employed as a porter.

One day while employed on a boat laden with stones in lifting and placing on the quay, to which the boat was fastened, very heavy stones, averaging 150 pounds in weight, having taken from the bottom of the boat one of these stones, and raised it with difficulty to the level of the pubis, on which she supported it, in order to place it on the quay still 12 or 16 inches higher, the woman, whose arms were not strong enough for the task, collecting all her strength, straight-

ended herself and pushed the stone on to the edge of the quay by the help of her abdomen. The stone reached its position, but the poor woman felt a sharp pain in the left groin, without crepitus. She described the pain as tearing in character, but in spite of it completed her day's work.

The next day she carried stones all day in a wheel barrow. The day after she walked 4 or 5 miles ; she felt while walking a strange sensation, as she expressed it, like that of labor. Arrived at the end of her journey she fell from fatigue ; was taken to Nantes on a boat, sent to the hospital, and placed in a medical ward, as being affected with paraplegia. On repeated examinations to verify the diagnosis, bony crepitus was heard when she was placed on her side. A fracture of the pelvis was then easily recognized, and she was placed in the surgical ward of M. Letenneur, who found her in the following condition on the 4th of May.

Decubitus dorsal : no deformity (of the pelvis), at first sight. No pain except on active or passive movement.

The lower limbs appear powerless ; when told to raise her feet she declares it to be impossible ; on insisting, the knees are flexed and the feet slide on the bed, as is observed in fracture of the neck of the femur.

When the knee is flexed the patient can make some movements of adduction and abduction, which are accompanied by pain at the left side of the pubis. On raising one limb after the other and moving it, it is evident that the coxo-femoral articulations are uninjured.

On examining the pubis there is found on the left side, on the body of the bone, a projection, just outside of the spine and extending downwards. It is formed by the internal fragment of the fractured pubis ; the external fragment is a little sunken, and pressure with the finger at this point causes pretty severe pain. On the right side nothing analogous is found, but the patient feels there a pain which follows the direction of the tendon of the psoas-iliacus up to its insertion.

Vaginal examination gives evidence of a fracture, with slight displacement of a descending ramus of the pubis. The right side of the arch is intact.

Finally, on making the patient lie on the right side, a very marked crepitus, the situation of which corresponds to the point of deformity, is felt, and heard at some distance. This crepitus, which the patient produces at will, cannot be excited by endeavors to separate or approach the ilia.

The spine presents no painful point ; the same is true of the sacro-iliac symphyses. The patient states that she has had no pain in the back. Micturition had been interrupted only one day, when it was necessary to catheterize the patient. Since, it had always been easy. Efforts at defecation cause pain about the pubis only when they are very energetic.

The 6th of May, M. Letenneur caused a gymnast's belt to be applied around the hips ; immediately, the patient was able to raise the limbs without pain. When the belt was unclasped, the want of power in the lower limbs instantly reappeared.

At the end of twenty days the crepitus disappeared, and on the 2d of July, spite of the complication of a facial erysipelas, accompanied by vomiting and diarrhoea, which considerably emaciated her, she was completely cured ; her walk was easy ; abduction of the left thigh was alone a little troublesome. The consolidation appeared complete, but there existed a difference of level between the two fragments of nearly one fourth of an inch. The spine of the pubis being higher and farther forward than that of the opposite side, it followed that the ligament of Fallopis was by so much the more prominent, and the arch formed by it the more marked.—*L'Union Médicale*.

Is an extract from Dr. Pavy's treatise on the function of digestion, to be found in the *Dublin Quarterly*, the theory of Bernard as to the protection of the stomach against the solvent action of the gastric juice by the constant renewal of the epithelium during life, is proved to be incorrect by the following facts : 1. After the removal of a portion of the mucous membrane of that viscous, complete repair takes place by cicatrization. 2. The stomach resists the action of the gastric juice for a long time, even when its mucous layer has been destroyed by cancer or ulcers.

Dr. Pavy thinks that the alkalinity of the blood, flowing through the capillaries of the walls of the stomach, serves to neutralize the solvent power of the acid gastric juice. That so long as the circulation continues active the flow of the alkaline blood is commensurate with the secretion of the acid fluid ; but as soon as the blood becomes stagnant, the juice already secreted is competent to act directly upon the walls of the stomach and, consequently, we frequently find perforation in *post-mortem* examinations.—*Richmond and Louisville Medical Journal*.

Selectious and Medical Items.

THE SKULL NOT A TEST OF DISTINCTION OF RACES.—Prof. Huxley denies that the shape of the skull is the standard by which the position and affinities of a race are to be judged. The characteristics on which he relies are complexion, hair and eyes.

“ Guided by these, mankind may be divided into—1. The Australoid type, of which the complexion varies from dark to chocolate, the eyes are black, and the hair long and wavy. 2. The Negroid type, in which the complexion runs down to absolute blackness, the eyes are dark, and the hair crisp and woolly. 3. The Mongoloid, in which the skin is yellowish or olive, the eyes black, and the hair straight and lanky. 4. The Xanthochroid or Blonde, which has fair skin, showing through it the pink tinge of the blood, yellow hair and blue eyes. In the two latter of these types the skull is variable, in the two former it is invariably long. The Mongoloid and the Xanthochroid races present no special difficulties in their geographical distribution. The former have spread from Northern Asia all over the two Americas; the Xanthochroid have emerged from the Himalaya and Caucasus to cover two large continuous tracts of Asia and Europe. But the other two types present singular geographical anomalies. The Australoid type is found only in the mainland of Australia, far away in Central India in some tribes of the Deccan, and again in the ancient Egyptians, as depicted on their monuments. The Negroid type, whose home is Africa—but only Africa south of the Sahara—is only found again at a vast distance in Malacca, in the Andaman Islands, and in a line running round Australia, and including Papua, the Fuejee Islands, and Tasmania. Whence this singular distribution? Does it not point to a vastly remote time, when these distant localities, between which there now rolls a vast ocean, were parts of one tropical continent? And if so, does it not throw back the appearance of man upon the globe to an era immeasurably more remote than has ever yet been assigned to it by the boldest speculators?” —*Medical Times and Gazette.*

EXTERNAL MANIPULATION FOR DIAGNOSIS OF POSITION OF FETUS IN LABOR.—Immediately after the morning obstetrical lecture, a patient is placed on each bed for examination by touch during pregnancy. Perhaps there is nothing in obstetrics more striking to the observer than the perfection which is attained in the external examination. In almost every case the position is ascertained with considerable accuracy. The fingers of both hands are pressed with considerable force above the pelvis, so as to receive the head between them, then a series of rather rough palpations, with the fingers of each hand alternately, in quick succession, are made over the abdomen, to ascertain the position of the so-called “small parts,” when an auscultation, which is not always necessary, confirms the result. In every one of the breech cases present, the diagnosis was so established, and it is really astonishing how readily

a little practice renders it a matter of easy acquirement. Easily executed as it is without exposure, and attended with so little inconvenience, it is a matter of wonder that it is not rendered more available by ours, the most practical of all people.—*Letter from Prague, in Cincinnati Lancet and Observer.*

In the *Dublin Quarterly* for August, 1868, Dr. Henry Thompson, Surgeon to the Tyrone County Infirmary, reports a case of primary excision of knee-joint, for gun-shot, resulting in recovery with a useful limb, one and a half inches shorter than the sound one. The patient, aged 27, was able to walk about, with the aid of a crutch, in four months, and to sustain the weight of his body upon the injured limb, bony union between the tibia and femur having occurred.—*Richmond and Louisville Medical Journal.*

In the State of Ohio, from the 1st of October last, by a new law no one is allowed to practise medicine who has not graduated in some legally constituted medical college and has a diploma from the same.

MEDICAL DIARY OF THE WEEK.

MONDAY, 9 A.M., Massachusetts General Hospital, Med. Clinic. 9 A.M., City Hospital, Ophthalmic Clinic. **TUESDAY, 9 A.M.**, City Hospital, Medical Clinic : 10, A.M., Medical Lecture. 9 to 11 A.M., Boston Dispensary. 10-11 A.M., Massachusetts Eye and Ear Infirmary.

WEDNESDAY, 10 A.M., Massachusetts General Hospital Surgical Visit. 11 A.M., OPERATIONS.

FRIDAY, 9 A.M., City Hospital, Ophthalmic Clinic ; 10, A.M., Surgical Visit ; 11, A.M., OPERATIONS. 9 to 11, A.M., Boston Dispensary.

SATURDAY, 10 A.M., Massachusetts General Hospital Surgical Visit ; 11, A.M., OPERATIONS.

TO CORRESPONDENTS.—Communication accepted.—New Shoe for Club-foot.

Will the gentleman who wrote a note to us on the mortality of Rebel prisoners, send his name and address?

BOOKS AND PAMPHLETS RECEIVED.—Vol. II., American Edition, of Aitken's Science and Practice of Medicine. Philadelphia: Lindsay & Blakiston. 1868. 8vo. Pp. 1079.—A Rational Treatise on the Trunkal Muscles, &c. &c. By E. P. Banning, M.D. New York: Townsend & Adams. 1868. 8vo. Pp. 352.—An Inaugural Address introductory to the Course on Institutes of Medicine in the Jefferson Medical College, Philadelphia. By Prof. J. Aitken Meigs, M.D.—Report of the Proceedings of the Association of Medical Superintendents of American Institutions for the Insane, at their Twenty-second Annual Meeting, held in Boston on the 2d, 3d, 4th and 5th days of June, 1868.—The Seventy-second Annual Report of the Boston Dispensary, with By-laws, Act of Incorporation, &c.

DEATHS IN BOSTON for the week ending Saturday noon, November 14th, 94. Males, 45—Females, 49.—Accident, 3—apoplexy, 1—congestion of the brain, 4—bronchitis, 4—cancer, 1—consumption, 24—convulsions, 3—croup, 6—debility, 1—diphtheria, 1—dropsy, 3—dropsy of the brain, 1—scarlet fever, 3—typhoid fever, 4—haematuria, 1—disease of the heart, 4—disease of the liver, 2—congestion of the lungs, 2—inflammation of the lungs, 5—marasmus, 4—paralysis, 2—peritonitis, 1—premature birth, 3—puerperal disease, 2—scrofula, 1—spina bifida, 1—suicide, 2—teething, 1—unknown, 3—whooping cough, 1.

Under 5 years of age, 31—between 5 and 20 years, 8—between 20 and 40 years, 21—between 40 and 60 years, 21—above 60 years, 13. Born in the United States, 63—Ireland, 28—other places, 3.